

Abstract

There is provided a catalyst for hydrotreating a hydrocarbon oil, which comprises an inorganic oxide support containing a certain amount of phosphorus oxide having provided thereon: at least one selected from metals in the Group 6 of the periodic table, at least one selected from metals in the Group 8 of the periodic table, and carbon, and which has a certain specific surface area, pore volume, and mean pore diameter, a process for producing the same, and a method for hydrotreating a hydrocarbon oil using the same.

Thereby, the catalyst can be produced in a simple and convenient manner and sulfur compounds in the hydrocarbon oil can be exceedingly highly desulfurized and simultaneously nitrogen compounds can be diminished without necessitating severe operating conditions.